

- (MOD) S5.421** *Additional allocation:* in Germany and Austria, the band 2 690 - 2 695 MHz is also allocated to the fixed service on a primary basis. Such use is limited to equipment in operation by 1 January 1985.
- MOD S5.422** *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Brunei Darussalam, Bulgaria, Cameroon, the Central African Republic, the Congo, Côte d'Ivoire, Cuba, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Georgia, Guinea, Guinea-Bissau, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kazakhstan, Lebanon, Lithuania, Malaysia, Malawi, Mali, Morocco, Mauritania, Moldova, Mongolia, Nigeria, Oman, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, Romania, Russia, Singapore, Somalia, Tajikistan, Thailand, Tunisia, Turkmenistan, Ukraine, Yemen, Yugoslavia, Zaire and Zambia, the band 2 690 - 2 700 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985.
- NOC S5.423** In the band 2 700 - 2 900 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the aeronautical radionavigation service.
- NOC S5.424** *Additional allocation:* in Canada, the band 2 850 - 2 900 MHz is also allocated to the maritime radionavigation service, on a primary basis, for use by shore-based radars.
- NOC S5.425** In the band 2 900 - 3 100 MHz, the use of the shipborne interrogator-transponder system (SIT) shall be confined to the sub-band 2 930 - 2 950 MHz.
- NOC S5.426** The use of the band 2 900 - 3 100 MHz by the aeronautical radionavigation service is limited to ground-based radars.
- NOC S5.427** In the bands 2 900 - 3 100 MHz and 9 300 - 9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. S4.9 of these Regulations.
- MOD S5.428** *Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, Cuba, Georgia, Kazakhstan, Moldova, Mongolia, Poland, Kyrgyzstan, Romania, Russia, Tajikistan, Turkmenistan Ukraine, the band 3 100 - 3 300 MHz is also allocated to the radionavigation service on a primary basis.

MOD S5.429

Additional allocation: in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, China, the Congo, the United Arab Emirates, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Libya, Malaysia, Oman, Pakistan, Qatar, Syria, Democratic People's Republic of Korea, Singapore and Yemen, the band 3 300 - 3 400 MHz is also allocated to the fixed and mobile services on a primary basis. The countries bordering the Mediterranean shall not claim protection for their fixed and mobile services from the radiolocation service.

MOD S5.430

Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Cuba, Georgia, Kazakhstan, Moldova, Mongolia, Poland, Kyrgyzstan, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 3 300 - 3 400 MHz is also allocated to the radionavigation service on a primary basis.

MHz
3 400 – 4 800

Allocation to Services		
Region 1	Region 2	Region 3
3 400 – 3 600 FIXED FIXED-SATELLITE (space-to-Earth) Mobile Radiolocation S5.431 S5.434	3 400 – 3 500 FIXED FIXED-SATELLITE (space-to-Earth) Amateur Mobile Radiolocation S5.433 S5.282 S5.432	
	3 500 – 3 700 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Radiolocation S5.433 S5.435	
3 600 – 4 200 FIXED FIXED-SATELLITE (space-to-Earth) Mobile	3 700 – 4 200 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
	4 200 – 4 400 AERONAUTICAL RADIONAVIGATION S5.438 S5.437 S5.439 S5.440	
4 400 – 4 500	FIXED MOBILE	
4 500 – 4 800	FIXED FIXED-SATELLITE (space-to-Earth) S5.441 MOBILE	

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- (MOD) S5.431 *Additional allocation:* in Germany, Israel, Nigeria and the United Kingdom, the band 3 400 - 3 475 MHz is also allocated to the amateur service on a secondary basis.
- MOD S5.432 *Different category of service:* in Indonesia, Japan and Pakistan, the allocation of the band 3 400 - 3 500 MHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. S5.33).
- NOC S5.433 In Regions 2 and 3, in the band 3 400 - 3 600 MHz the radiolocation service is allocated on a primary basis. However, all administrations operating radiolocation systems in this band are urged to cease operations by 1985. Thereafter, administrations shall take all practicable steps to protect the fixed-satellite service and coordination requirements shall not be imposed on the fixed-satellite service.
- NOC S5.434 In Denmark, Norway and the United Kingdom, the fixed, radiolocation and fixed-satellite services operate on a basis of equality of rights in the band 3 400 - 3 600 MHz. However, these Administrations operating radiolocation systems in this band are urged to cease operations by 1985. After this date, these Administrations shall take all practicable steps to protect the fixed-satellite service and coordination requirements shall not be imposed on the fixed-satellite service.
- NOC S5.435 In Japan, in the band 3 620 - 3 700 MHz, the radiolocation service is excluded.
- SUP S5.436
- MOD S5.437 *Additional allocation:* in Germany, Denmark and Norway, the band 4 200 - 4 210 MHz is also allocated to the fixed service on a secondary basis.
- NOC S5.438 Use of the band 4 200 - 4 400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. However, passive sensing in the earth exploration-satellite and space research services may be authorized in this band on a secondary basis (no protection is provided by the radio altimeters).
- MOD S5.439 *Additional allocation:* in China, the Islamic Republic of Iran, Libya and the Philippines, the band 4 200 - 4 400 MHz is also allocated to the fixed service on a secondary basis.

MOD S5.440 The standard frequency and time signal-satellite service may be authorized to use the frequency 4 202 MHz for space-to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of ± 2 MHz of these frequencies, subject to agreement obtained under No. S9.21.

MOD S5.441 The use of the bands 4 500 - 4 800 MHz (space-to-Earth), 6 725 - 7 025 MHz (Earth-to-space), 10.7 - 10.95 GHz (space-to-Earth), 11.2 - 11.45 GHz (space-to-Earth) and 12.75 - 13.25 GHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the provisions of Appendix 30B.

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NOC S5.442 In the bands 4 825 - 4 835 MHz and 4 950- 4 990 MHz, the allocation to the mobile service is restricted to the mobile, except aeronautical mobile, service.

NOC S5.443 *Different category of service:* in Argentina, Australia and Canada, the allocation of the bands 4 825 - 4 835 MHz and 4 950 - 4 990 MHz to the radio astronomy service is on a primary basis (see No. S5.33).

MOD S5.444 The band 5 000 - 5 150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. The requirements of this system shall take precedence over other uses of this band. For the use of this band, No. S5.444A and Resolution COM5-3 apply.

ADD S5.444A *Additional allocation:* the band 5 091- 5 150 MHz is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis. This allocation is limited to feeder links of non-geostationary mobile-satellite systems and is subject to coordination under No. S9.11bis.

In the band 5 091 - 5 150 MHz, the following conditions also apply:

- prior to 1 January 2010, the use of the band 5 091 - 5 150 MHz by feeder links of non-geostationary-satellite systems in the mobile-satellite service shall be made in accordance with Resolution COM5-3;
- prior to 1 January 2010, the requirements of existing and planned international standard systems for the aeronautical radionavigation service which cannot be met in the 5 000 - 5 091-MHz band, shall take precedence over other uses of this band;
- after 1 January 2008, no new assignments shall be made to stations providing feeder links of non-geostationary-satellite mobile-satellite systems;
- after 1 January 2010, the fixed-satellite service will become secondary to the aeronautical radionavigation service.

SUP S5.445

- MOD S5.446** *Additional allocation:* in the countries listed in Nos. **S5.369** and **S5.400**, the band 5 150 - 5 216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under No. **S9.21**. In Region 2, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis. In Regions 1 and 3, except those countries listed in Nos. **S5.369** and **S5.400**, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a secondary basis. The use by the radiodetermination-satellite service is limited to feeder links in conjunction with the radiodetermination-satellite service operating in the bands 1 610 - 1 626.5 MHz and/or 2 483.5 - 2 500 MHz. The total power flux-density at the Earth's surface shall in no case exceed -159 dBW/m² in any 4 kHz band for all angles of arrival.
- MOD S5.447** *Additional allocation:* in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Greece, Israel, Italy, Japan, Jordan, Lebanon, Liechtenstein, Luxembourg, Malta, Morocco, Norway, Pakistan, the Netherlands, Portugal, Syria, the United Kingdom, Sweden, Switzerland and Tunisia, the band 5 150 - 5 250 MHz is also allocated to the mobile service, on a primary basis, subject to agreement obtained under No. **S9.21**.
- ADD S5.447A** The allocation to the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to coordination under No. **S9.11bis**.
- ADD S5.447B** *Additional allocation:* the band 5 150 - 5 216 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. This allocation is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to provisions of No. **S9.11bis**. The power flux-density at the Earth's surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5 150 - 5 216 MHz shall in no case exceed -164 dB(W/m²) in any 4 kHz band for all angles of arrival.

- ADD S5.447C** Administrations responsible for fixed-satellite service networks in the band 5 150 - 5 250 MHz operated under Nos. S5.447A and S5.447B shall coordinate on an equal basis in accordance with No. S9.11bis with administrations responsible for non-geostationary-satellite networks operated under No. S5.446 and brought into use prior to 17 November 1995. Satellite networks operated under No. S5.446 brought into use after 17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. S5.447A and S5.447B.
- MOD S5.448** *Additional allocation:* in Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakhstan, Libya, Moldova, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 5 250 - 5 350 MHz is also allocated to the radionavigation service on a primary basis.
- NOC S5.449** The use of the band 5 350 - 5 470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.
- MOD S5.450** *Additional allocation:* in Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Georgia, the Islamic Republic of Iran, Kazakhstan, Moldova, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 5 470 - 5 650 MHz is also allocated to the aeronautical radionavigation service on a primary basis.
- NOC S5.451** *Additional allocation:* in the United Kingdom, the band 5 470 - 5 850 MHz is also allocated to the land mobile service on a secondary basis. The power limits specified in Nos. S21.2, S21.3, S21.4 and S21.5 shall apply in the band 5 725 - 5 850 MHz.
- NOC S5.452** Between 5 600 MHz and 5 650 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the maritime radionavigation service.
- MOD S5.453** *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, the Central African Republic, China, the Congo, the Republic of Korea, Egypt, the United Arab Emirates, Gabon, Guinea, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Libya, Madagascar, Malaysia, Malawi, Niger, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syria, Democratic People's Republic of Korea, Singapore, Swaziland, Tanzania, Chad, and Yemen, the band 5 650 - 5 850 MHz is also allocated to the fixed and mobile services on a primary basis.

MOD S5.454

Different category of service: in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakhstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 5 670 - 5 725 MHz to the space research service is on a primary basis (see No. S5.33).

MOD S5.455

Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Cuba, Georgia, Hungary, Kazakhstan, Latvia, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, Russia, Tajikistan, Turkmenistan and Ukraine, the band 5 670 - 5 850 MHz is also allocated to the fixed service on a primary basis.

		MHz 5 725 - 7 300		
		Allocation to Services		
		Region 1	Region 2	Region 3
MOD	5 725 - 5 830 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur		5 725 - 5 830 RADIOLOCATION Amateur	
MOD	S5.150 S5.451 S5.453 S5.455 S5.456		S5.150 S5.453 S5.455	
MOD	5 830 - 5 850 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth)		5 830 - 5 850 RADIOLOCATION Amateur Amateur-satellite (space-to-Earth)	
(MOD)	S5.150 S5.451 S5.453 S5.455 S5.456		S5.150 S5.453 S5.455	
	5 850 - 5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.150	5 850 - 5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Amateur Radiolocation S5.150	5 850 - 5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Radiolocation S5.150	
MOD	5 925 - 6 700	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.440 S5.458 S5.149		
MOD	6 700 - 7 075	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) S5.441 MOBILE S5.458 S5.458B S5.458C S5.458D		
	7 075 - 7 250	FIXED MOBILE S5.458 S5.459 S5.460		
	7 250 - 7 300	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE S5.461		

- (MOD) S5.456** *Additional allocation:* in Germany and in Cameroon, the band 5 755 - 5 850 MHz is also allocated to the fixed service on a primary basis.
- SUP S5.457**
- MOD S5.458** In the band 6 425 - 7 075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7 075 - 7 250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6 425 - 7 025 MHz and 7 075 - 7 250 MHz.
- ADD S5.458B** Administrations making submissions in the band 7 025 - 7 075 MHz (Earth-to-space) for geostationary-satellite systems in the fixed-satellite service after 17 November 1995 shall consult on the basis of relevant ITU-R Recommendations with the administrations that have notified and brought into use non-geostationary-satellite systems in this frequency band before 18 November 1995 upon request of the latter administrations. This consultation shall be with a view to facilitating shared operation of both geostationary-satellite systems in the fixed-satellite service and non-geostationary-satellite systems in this band.
- ADD S5.458C** In making assignments in the band 6 700 - 7 075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6 650 - 6 675.2 MHz from harmful interference from unwanted emissions.
- ADD S5.458D** The space-to-Earth allocation to the fixed-satellite service in the band 6 700 - 7 075 MHz is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service and is subject to coordination under **S9.11bis**. The use of the band 6 700 - 7 075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to **S22.2**.
- MOD S5.459** *Additional allocation:* in Region 2, the band 7 125 - 7 155 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. **S9.21**.

MOD S5.460

Additional allocation: the band 7 145 - 7 235 MHz is also allocated to the space research (Earth-to-space) service on a primary basis, subject to agreement obtained under No. S9.21. The use of the band 7 145 - 7 190 MHz is restricted to deep space; no emissions to deep space shall be effected in the band 7 190 - 7 235 MHz.

MOD S5.461

Additional allocation: the bands 7 250 - 7 375 MHz (space-to-Earth) and 7 900 - 8 025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. S9.21.

MHz
7 300 – 8 175

Allocation to Services		
Region 1	Region 2	Region 3
7 300 – 7 450	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile S5.461	
7 450 – 7 550	FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
7 550 – 7 750	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
7 750 – 7 900	FIXED MOBILE except aeronautical mobile	
7 900 – 8 025	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.461	
8 025 – 8 175 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth) S5.462 S5.464	8 025 – 8 175 EARTH EXPLORATION- SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.463	8 025 – 8 175 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth) S5.462 S5.464

- NOC S5.462** In the band 8 025 - 8 400 MHz, the power flux-density limits specified in Article S21, Table [AR28], shall apply in Regions 1 and 3 to the earth exploration-satellite service.
- NOC S5.463** In Region 2, aircraft stations are not permitted to transmit in the band 8 025 - 8 400 MHz.
- MOD S5.464** *Different category of service:* in Bangladesh, Benin, Burkina Faso, Cameroon, China, the Central African Republic, Côte d'Ivoire, Egypt, France, Guinea, India, the Islamic Republic of Iran, Italy, Japan, Libya, Mali, Niger, Pakistan, Senegal, Somalia, Sudan, Sweden, Tanzania, Zaire and Zambia, the allocation of the band 8 025 - 8 400 MHz to the Earth exploration-satellite service (space-to-Earth) is on a primary basis, subject to agreement obtained under No. S9.21.

MHz
8 175 – 8 750

Allocation to Services		
Region 1	Region 2	Region 3
8 175 – 8 215 FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth) S5.462 S5.464	8 175 – 8 215 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE S5.463	8 175 – 8 215 FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth) S5.462 S5.464
8 215 – 8 400 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth) S5.462 S5.464	8 215 – 8 400 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE S5.463	8 215 – 8 400 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth) S5.462 S5.464
8 400 – 8 500	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth) S5.465 S5.466 S5.467	
8 500 – 8 750	RADIOLOCATION S5.333 S5.468 S5.469	

- NOC S5.465** In the space research service, the use of the band 8 400 - 8 450 MHz is limited to deep space.
- NOC S5.466** *Different category of service:* in Belgium, Israel, Luxembourg, Malaysia, Singapore and Sri Lanka, the allocation of the band 8 400 - 8 500 MHz to the space research service is on a secondary basis (see No. S5.32).
- NOC S5.467** *Alternative allocation:* in the United Kingdom, the band 8 400 - 8 500 MHz is allocated to the radiolocation and space research services on a primary basis.
- MOD S5.468** *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burundi, Cameroon, China, the Congo, Costa Rica, Egypt, the United Arab Emirates, Gabon, Guinea, Guyana, Indonesia, the Islamic Republic of Iran, Iraq, Jamaica, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, Morocco, Mauritania, Nepal, Niger, Nigeria, Oman, Pakistan, Qatar, Syria, Democratic People's Republic of Korea, Senegal, Singapore, Somalia, Swaziland, Tanzania, Chad, Thailand, Togo, Tunisia and Yemen, the band 8 500 - 8 750 MHz is also allocated to the fixed and mobile services on a primary basis.
- MOD S5.469** *Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakhstan, Lithuania, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 8 500 - 8 750 MHz is also allocated to the land mobile and radionavigation services on a primary basis.

MHz
8 750 – 10 000

Allocation to Services		
Region 1	Region 2	Region 3
8 750 – 8 850	RADIOLOCATION AERONAUTICAL RADIONAVIGATION S5.470 S5.471	
8 850 – 9 000	RADIOLOCATION MARITIME RADIONAVIGATION S5.472 S5.473	
9 000 – 9 200	AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation S5.471	
9 200 – 9 300	RADIOLOCATION MARITIME RADIONAVIGATION S5.472 S5.473 S5.474	
9 300 – 9 500	RADIONAVIGATION S5.476 Radiolocation S5.427 S5.474 S5.475	
9 500 – 9 800	RADIOLOCATION RADIONAVIGATION S5.333	
9 800 – 10 000	RADIOLOCATION Fixed S5.477 S5.478 S5.479	

- NOC S5.470** The use of the band 8 750 - 8 850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 MHz.
- MOD S5.471** *Additional allocation:* in Algeria, Germany, Bahrain, Belgium, China, the United Arab Emirates, France, Greece, Indonesia, the Islamic Republic of Iran, Libya, the Netherlands, Qatar and Sudan, the bands 8 825 - 8 850 MHz and 9 000 - 9 200 MHz are also allocated to the maritime radionavigation service, on a primary basis, for use by shore-based radars only.
- NOC S5.472** In the bands 8 850 - 9 000 MHz and 9 200 - 9 225 MHz, the maritime radionavigation service is limited to shore-based radars.
- MOD S5.473** *Additional allocation:* in Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Cuba, Georgia, Hungary, Kazakhstan, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the bands 8 850 - 9 000 MHz and 9 200 - 9 300 MHz are also allocated to the radionavigation service on a primary basis.
- NOC S5.474** In the band 9 200 - 9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article S31).
- NOC S5.475** The use of the band 9 300 - 9 500 MHz by the aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9 300 - 9 320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. In the band 9 300 - 9 500 MHz, ground-based radars used for meteorological purposes have priority over other radiolocation devices.
- NOC S5.476** In the band 9 300 - 9 320 MHz in the radionavigation service, the use of shipborne radars, other than those existing on 1 January 1976, is not permitted until 1 January 2001.

MOD S5.477

Different category of service: Algeria, Saudi Arabia, Austria, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, the Republic of Korea, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, the Islamic Republic of Iran, Iraq, Jamaica, Japan, Jordan, Kuwait, the Lebanon, Liberia, Malaysia, Nigeria, Oman, Pakistan, Qatar, Singapore, Somalia, Sudan, Sweden, Thailand, Trinidad and Tobago, and Yemen, the allocation of the band 9 800 - 10 000 MHz to the fixed service is on a primary basis (see No. S5.33).

MOD S5.478

Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakhstan, Moldova, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 9 800 - 10 000 MHz is also allocated to the radionavigation service on a primary basis.

NOC S5.479

The band 9 975 - 10 025 MHz is also allocated to the meteorological-satellite service on a secondary basis for use by weather radars.

GHz
10 – 10.7

Allocation to Services		
Region 1	Region 2	Region 3
10 – 10.45 FIXED MOBILE RADIOLOCATION Amateur S5.479	10 – 10.45 RADIOLOCATION Amateur S5.479 S5.480	10 – 10.45 FIXED MOBILE RADIOLOCATION Amateur S5.479
10.45 – 10.5	RADIOLOCATION Amateur Amateur-Satellite S5.481	
10.5 – 10.55 FIXED MOBILE Radiolocation	10.5 – 10.55 FIXED MOBILE RADIOLOCATION	
10.55 – 10.6	FIXED MOBILE except aeronautical mobile Radiolocation	
10.6 – 10.68	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation S5.149 S5.482	
10.68 – 10.7	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) S5.340 S5.483	

- NOC S5.480** *Additional allocation:* in Costa Rica, Ecuador, Guatemala and Honduras, the band 10 - 10.45 GHz is also allocated to the fixed and mobile services on a primary basis.
- MOD S5.481** *Additional allocation:* in Germany, Angola, China, Ecuador, Spain, Japan, Morocco, Nigeria, Oman, Democratic People's Republic of Korea, Sweden, Tanzania and Thailand, the band 10.45 - 10.5 GHz is also allocated to the fixed and mobile services on a primary basis.
- MOD S5.482** In the band 10.6 - 10.68 GHz, stations of the fixed and mobile, except aeronautical mobile, services shall be limited to a maximum equivalent isotropically radiated power of 40 dBW and the power delivered to the antenna shall not exceed -3 dBW. These limits may be exceeded subject to agreement obtained under No. S9.21. However, in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, China, the United Arab Emirates, Georgia, India, Indonesia, the Islamic Republic of Iran, Iraq, Japan, Kazakhstan, Kuwait, Latvia, Lebanon, Moldova, Nigeria, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Ukraine, the restrictions on the fixed and mobile, except aeronautical mobile, services are not applicable.
- MOD S5.483** *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Bulgaria, Cameroon, China, Colombia, the Republic of Korea, Costa Rica, Cuba, Egypt, the United Arab Emirates, Georgia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kuwait, Latvia, Lebanon, Moldova, Mongolia, Uzbekistan, Pakistan, Qatar, Kyrgyzstan, the Democratic People's Republic of Korea, Romania, Russia, Tajikistan, Turkmenistan, Ukraine, Yemen and Yugoslavia, the band 10.68 - 10.7 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985.

GHz
10.7 – 12.75

Allocation to Services		
Region 1	Region 2	Region 3
10.7 – 11.7 FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.441 S5.484 MOBILE except aeronautical mobile	10.7 – 11.7 FIXED FIXED-SATELLITE (space-to-Earth) S5.441 MOBILE except aeronautical mobile	
11.7 – 12.5 FIXED BROADCASTING BROADCASTING-SATELLITE MOBILE except aeronautical mobile	11.7 – 12.1 FIXED 837 FIXED-SATELLITE (space-to-Earth) Mobile except aeronautical mobile S5.485 S5.488	11.7 – 12.2 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE
	12.1 – 12.2 FIXED-SATELLITE (space-to-Earth) S5.485 S5.488 S5.489	
	12.2 – 12.7 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE S5.487	12.2 – 12.5 FIXED MOBILE except aeronautical mobile BROADCASTING S5.487 S5.491
	12.5 – 12.75 FIXED-SATELLITE (space-to-Earth) (Earth-to-space) S5.494 S5.495 S5.496	12.5 – 12.75 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile BROADCASTING-SATELLITE S5.493

- NOC S5.484** In Region 1, the use of the band 10.7 - 11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.
- NOC S5.485** In Region 2, in the band 11.7 - 12.2 GHz, transponders on space stations in the fixed-satellite service may be used additionally for transmissions in the broadcasting-satellite service, provided that such transmissions do not have a maximum e.i.r.p. greater than 53 dBW per television channel and do not cause greater interference or require more protection from interference than the coordinated fixed-satellite service frequency assignments. With respect to the space services, this band shall be used principally for the fixed-satellite service.
- MOD S5.486** *Different category of service:* in Mexico and the United States, the allocation of the band 11.7 - 12.1 GHz to the fixed service is on a secondary basis (see No. S5.32).
- NOC S5.487** In the band 11.7 - 12.5 GHz in Regions 1 and 3, the fixed, fixed-satellite, mobile, except aeronautical mobile, and broadcasting services, in accordance with their respective allocations, shall not cause harmful interference to broadcasting-satellite stations operating in accordance with the provisions of Appendix S30.
- NOC S5.488** The use of the bands 11.7 - 12.2 GHz by the fixed-satellite service in Region 2 and 12.2 - 12.7 GHz by the broadcasting-satellite service in Region 2 is limited to national and subregional systems. The use of the band 11.7 - 12.2 GHz by the fixed-satellite service in Region 2 is subject to previous agreement between the administrations concerned and those having services, operating or planned to operate in accordance with the Table, which may be affected (see Articles S9 and S11). For the use of the band 12.2 - 12.7 GHz by the broadcasting-satellite service in Region 2, see Appendix S30.
- MOD S5.489** *Additional allocation:* in Peru, the band 12.1 - 12.2 GHz is also allocated to the fixed service on a primary basis.
- NOC S5.490** In Region 2, in the band 12.2 - 12.7 GHz, existing and future terrestrial radiocommunication services shall not cause harmful interference to the space services operating in conformity with the Broadcasting-Satellite Plan for Region 2 contained in Appendix S30.

- MOD S5.491** *Additional allocation:* in Region 3, the band 12.2 - 12.5 GHz is also allocated to the fixed-satellite (space-to-Earth) service on a primary basis, limited to national and sub-regional systems. The power flux-density limits in Article S21, Table [AR28] shall apply to this frequency band. The introduction of the service in relation to the broadcasting-satellite service in Region 1 shall follow the procedures specified in Article 7 of Appendix S30, with the applicable frequency band extended to cover 12.2 - 12.5 GHz.
- NOC S5.492** In Region 2, in the band 12.2 - 12.7 GHz, assignments to stations of the broadcasting-satellite service in the Plan for Region 2 contained in Appendix S30 may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference or require more protection from interference than the broadcasting-satellite service transmissions operating in conformity with the Region 2 Plan. With respect to the space services, this band shall be used principally for the broadcasting-satellite service.
- NOC S5.493** The broadcasting-satellite service in the band 12.5 - 12.75 GHz in Region 3 is limited to community reception with a power flux-density not exceeding $-111 \text{ dB(W/m}^2\text{)}$ as defined in Annex 5 of Appendix S30. See also Resolution 34.
- MOD S5.494** *Additional allocation:* in Algeria, Angola, Saudi Arabia, Bahrain, Cameroon, the Central African Republic, the Congo, Côte d'Ivoire, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Madagascar, Mali, Morocco, Mongolia, Niger, Nigeria, Qatar, Syria, Senegal, Somalia, Sudan, Chad, Togo, Yemen and Zaire, the band 12.5 - 12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
- MOD S5.495** *Additional allocation:* in Belgium, Bosnia and Herzegovina, Croatia, Denmark, Spain, France, Greece, The Former Yugoslav Republic of Macedonia, Liechtenstein, Luxembourg, Monaco, Norway, Uganda, Portugal, Romania, Slovenia, Switzerland, Tanzania, Tunisia and Yugoslavia, the band 12.5 - 12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis.